

WHAT IS CLAIMED IS:

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1. A method for identifying a patient having an increased risk for developing breast precancer or breast cancer, said method comprising:
providing a ductal fluid sample from one duct of a breast of a patient, said fluid not mixed with ductal fluid from any other duct of the breast; and
detecting a viral agent in the ductal fluid sample.
 2. A method as in claim 1, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker, in the sample.
 3. A method as in claim 1, wherein the ductal fluid is retrieved by nipple aspiration.
 4. A method as in claim 1, wherein the ductal fluid is retrieved by placing a ductal access tool in the duct and infusing fluid into the duct through the tool and retrieving from the accessed duct through the tool a portion of the infused fluid mixed with ductal fluid.
 5. A method as in claim 3, wherein the method is repeated for more than one duct on a breast.
 6. A method as in claim 3, wherein the method is repeated for a plurality of ducts on a breast.
 7. A method as in claim 1 further comprising analyzing the ductal fluid for abnormal cytology.
 8. A method as in claim 1, wherein a viral agent is detected, further comprising monitoring a variable selected from the group consisting of a viral titer, concentration of a viral agent, and presence of a viral marker by taking repeated periodic ductal fluid samplings.
 9. A method as in claim 8, wherein a viral agent is monitored and the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker by taking repeated periodic ductal fluid samplings.
 10. A method as in claim 8, wherein the periodicity is selected from the group consisting of daily, weekly, biweekly, monthly, bimonthly, every six months, annually, and biannually.
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11. A method as in claim 1, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.
12. A method of treating a patient at risk for or having a breast precancer or breast cancer comprising:
- detecting a viral agent in a fluid sample collected from a breast duct; and
 - delivering to the patient a composition comprising an antiviral agent specific for the detected viral agent.
13. A method as in claim 12, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker.
14. A method as in claim 12, wherein the antiviral agent is delivered intraductally to a duct in which the viral agent is detected.
15. A method as in claim 12, wherein viral agent is detected in more than one fluid sample collected separately from more than one breast duct
16. A method as in claim 12, wherein viral agent is detected in a fluid sample collected from a plurality of breast ducts.
17. A method as in claim 12, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.
18. A method as in claim 12, wherein the antiviral agent is selected from the group consisting of an anti-HPV viral agent, an anti-EBV viral agent, and an anti-herpes viral agent.
19. A method as in claim 12, wherein the composition comprising said antiviral agent is delivered systemically.
20. A method as in claim 14, wherein the antiviral agent is delivered by placing a ductal access tool in a target duct and infusing a composition comprising the antiviral agent into the duct through the tool.
21. A kit or system for identifying a patient having an increased risk for developing breast precancer or breast cancer, said kit or system comprising a ductal access tool, and reagents and instructions for detecting a viral agent in ductal fluid collected using the tool.
22. A kit or system for treating a patient at risk for or having a breast precancer or breast cancer in which a viral agent is a component and is present in the affected duct, said kit or system comprising a ductal access tool for intraductal delivery of a composition, the composition comprising an antiviral agent, and instructions for use.